Amendment Accompanying RCE in response to March 21, 2007 Office Action

## **Remarks**

Claims 4, 16, 17, 19 and 21-24 remain in the case. Claims 4 and 17 have been amended. Claims 5-15 and 20 have been cancelled. Support for the amendments can be found in the specification as filed. No new matter has been added.

Favorable reconsideration and allowance of this application is respectfully requested.

## **CLAIM OBJECTIONS**

Claims 4 and 17 have been amended to recite the phrase "specific gravity" as opposed to "gravity." Specifically, step (d) of claims 4 and 17 has been amended to recite "specific gravity" as opposed to "gravity." Accordingly, Applicants respectfully submit that the objections to claims 4 and 17 have been overcome, and withdrawal of this rejection is requested.

## REJECTIONS UNDER 35 USC §103

The Examiner has maintained the rejection of claims 4, 5, 6, 16, 17, 19 and 20-24 as being obvious over GB patent 2197341 to Quain (Quain) in view of the Handbook of Brewing and in further view of applicants' own admission on pages 1-4 of the application as filed.

Regarding claims 4 and 17, the Examiner states that Quain teaches a method of brewing beer by suspending yeast in a wort-free aqueous solution. The Examiner contends that Applicants previous arguments that Quain does not teach a wort-free aqueous solution are not persuasive because Quain teaches suspending yeast in distilled water. However, claims 4 and 17 also recite "wort-free aqueous solution comprising liquid adjunct." This is clearly not taught by Quain's use of distilled water, nor would one of skill in the art be motivated to add liquid adjunct to the distilled water of Quain. As stated in the application as filed, Quain teaches a method of fermenting wort where the pitching yeast is exposed to oxygen until the yeast reaches its maximum rate of oxygen consumption. Nothing in Quain teaches the use of a wort-free aqueous solution comprising liquid adjunct, as recited in the present claims. Further, one of skill is not motivated to add liquid adjunct to achieve the present invention.

Further, as amended, claim 4 (c) now recites transferring the yeast suspension to a to a suitable volume of <u>nonaerated</u> wort. This is also neither taught or suggested by Quain or the Handbook of Brewing.

Because Quain does not teach, suggest or motivate one of skill in the art to use a wort-free aqueous solution comprising liquid adjunct, Applicants submit that Quain cannot be used to render the

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subject matter of the pending claims obvious. Further. Applicants submit that Quain also cannot be used to render the pending claims obvious when combined with the Handbook of Brewing. The Examiner concedes that Quain does not teach or suggest using the specific gravity for aeration and pitching recited in claims 4 and 17. However, the Examiner goes on to allege that it would have been obvious to use the method of Quain with the specific gravity values taught for pitching in the Handbook of Brewing. However, Applicants submit that Examiner has provided no indication as to why one of skill in the art would be motivated to combine the specific gravities taught in the Handbook of Brewing with the methods of Quain. Further, even if one of skill did make such a combination, neither Quain nor the Handbook of Brewing provide any teaching, suggestion or motivation to modify the combined teachings to use a wort-free aqueous solution comprising liquid adjunct.

The Examiner further concedes that Quain is silent regarding the addition of cereal sugars to the yeast suspension as cited in claims 4 and 17. Again, the Examiner alleges that the Handbook of Brewing teaches the carbohydrate requirement of sugars like sucrose, maltose and maltotriose. Therefore, the Examiner alleges that it would have been obvious to add maltose and maltotriose to the aqueous suspension for aerating yeast. However, Applicants submit that Examiner has provided no indication as to why one of skill in the art would be motivated to combine the carbohydrate requirements taught in the Handbook of Brewing with the methods of Quain. Further, even if one of skill did make such a combination, neither Quain nor the Handbook of Brewing provide any teaching, suggestion or motivation to modify the combined teachings to use a wort-free aqueous solution comprising liquid adjunct. Therefore, Applicants respectfully submit that claims 4 and 17 are not obvious over Quain, even in view of the Handbook of Brewing.

Regarding claims 5 and 20, the Examiner concedes that Quain is silent regarding the addition of zinc to the yeast suspension. However, the Examiner alleges that "Applicants admit that the prior art has added zinc to yeast fermentations to enhance the fermentation rate." The Examiner goes on to allege that the Handbook of Brewing teaches that adding zinc to water is well known in brewing processes. Regarding Applicants specification, a close reading shows that Applicants concede that "another approach to enhancing fermentation is by adding zinc to the yeast/wort solution as disclosed in U.S. patents 3,164,472 and 4,840,802." (page 3, lines 1-4). Nothing in Applicants specification discloses prior art teaching the use of a wort-free aqueous solution; in fact, Applicants claims are the first to disclose this novel approach. Further, what neither Quain nor the Handbook of Brewing teach or suggest is the addition of zinc to a wort-free aqueous solution, as recited in the present claims. Therefore, Applicants

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respectfully submit that claims 5 and 20 are not obvious in view of Quain, the specification, or the Handbook of Brewing. However, to move prosecution forward, Applicants have cancelled claims 5 and 20.

Regarding claim 7, the Examiner cites Quain as teaching a non-aerated wort. However, claim 1, from which claim 7 depends, clearly recites the use of a wort-free aqueous solution. As discussed above, nothing in Quain teaches or suggests this limitation. Therefore, Applicants submit that claim 7 cannot be obvious in view of Quain.

Regarding claim 16, the Examiner cites Quain as teaching that the gas is delivered above a maximum oxygen uptake rate of the yeast. However, claim 1, from which claim 16 depends, clearly recites the use of a wort-free aqueous solution. As discussed above, nothing in Quain teaches or suggests this limitation. Therefore, Applicants submit that claim 16 cannot be obvious in view of Quain.

Regarding claim 17, the Examiner cites Quain as teaching the monitoring of wort for an end of fermentation wherein the end of fermentation is reached in a shorter time. However, as discussed above, step (a) of claim 17 clearly recites the use of a <u>wort-free</u> aqueous solution. As discussed above, nothing in Quain teaches or suggests this limitation. Therefore, Applicants submit that claim 17 cannot be obvious in view of Quain.

Regarding claims 21-24, the Examiner cites Quain as teaching suspending yeast in an aqueous medium to oxygenate. The Examiner concedes that Quain is silent regarding the use of maltose and maltotriose. The Examiner goes on to state that the Handbook of Brewing teaches the teaches the carbohydrate requirement of sugars like sucrose, maltose and maltotriose. Therefore, the Examiner alleges that it would have been obvious to add maltose and maltotriose to the aqueous suspension for aerating yeast. However, claims 21 and 22 depend from claim 17, and claims 23 and 24 depend from claim 1, both of which, as discussed above, clearly recite the use of a wort-free aqueous solution. Quain does not teach or suggest the use of such a solution. Therefore, Applicants respectfully submit that it claims 21-24 are not obvious in view of Quain, even in combination with the teachings of the Handbook of Brewing.

## SUMMARY

The application is believed to be in condition for allowance and allowance of the same is requested. If all the claims are not allowed, Applicant requests a telephone interview with the Examiner and his supervisor. The Commissioner is authorized to charge any fees under 37 CFR § 1.17 that may be due on this application to Deposit Account 17-0055. Applicants have enclosed a Petition for Three

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Month Extension of Time and a Request for Continued Examination. If further fees are necessary, please charge Deposit Account 17-0055. The Commissioner is also authorized to treat this amendment and any future reply in this matter requiring a petition for an extension of time as incorporating a petition for extension of time for the appropriate length of time as provided by 37 CFR § 136(a)(3).

Respectfully submitted,

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